

AMENDMENTS TO CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A process to prepare a lubricant having a dynamic viscosity at -35°C of below 5000 cP by performing the following steps:
 - (a) ~~hydrocracking contacting~~ a feed containing more than 50 wt% wax by contacting said feed in the presence of hydrogen with a catalyst comprising a Group VIII metal component supported on a refractory oxide carrier under hydrocracking conditions sufficient to achieve between 40 and 70 wt% wax conversion; and
 - (b) contacting the effluent of step (a) with a catalyst composition comprising a noble Group VIII metal, a binder and zeolite crystallites of the MTW type to obtain a base oil product in high yield having a ~~lower~~ pour point below -10°C ~~than the effluent of step (b)~~ and having a viscosity index greater than 120; and
 - (c) adding a pour point depressant additive to the base oil product as obtained in step (b) thereby obtaining a lubricant having a dynamic viscosity at -35°C of below 5000 cP.
2. (Currently amended) The process according to claim 1, wherein the base oil product in step (b) has a pour point below -20°C and a viscosity index greater than 130 and below 180 the noble Group VIII metal in step (b) is platinum.
3. (Currently amended) The process according to claim 2, wherein the noble Group VIII metal in step (b) is platinum and the binder in step (b) is a low acidity binder which binder is essentially free of alumina.
4. (Previously presented) The process according to claim 3, wherein the binder is silica.
5. (Previously presented) The process according to claim 4, wherein the zeolite crystallites have been subjected to a selective surface dealumination process.
6. (Previously presented) The process according to claim 5, wherein the selective surface dealumination process comprises contacting the zeolite crystallites with an aqueous solution of a fluorosilicate salt wherein the fluorosilicate salt is represented by the formula:

(A)2/bSiF6

wherein 'A' is a metallic or non-metallic cation other than H⁺ having the valence 'b'.

7. (Previously presented) The process according to claim 6, wherein the wax containing feed is derived from a Fischer-Tropsch process, the Group VIII metal in step (a) is platinum and/or palladium and wherein the total effluent of step (a) is used as feed to step (b) in a series flow configuration.

8. (Currently amended) The process according to claim 1 [[6]], wherein the feed to step (a) comprises at least 700 ppm sulfur, the catalyst used in step (a) is a pre-sulphided catalyst comprising a Group VIB metal and a non-noble Group VIII metal and wherein the total effluent of step (a) is used as feed to step (b) in a series flow configuration.

9. (Previously presented) The process according to claim 8, wherein the wax conversion in step (a) is between 40 and 60%.

10. (Currently Amended) The process according to claim 1 [[6]], wherein the feed to step (a) comprises between 700 and 2000 ppm sulfur, the catalyst used in step (a) is a pre-sulphided catalyst comprising a Group VIB metal and a non-noble Group VIII metal and wherein at least part of the ammonia and hydrogen sulphide which is present in the effluent of step (a) is separated from said effluent prior to using said effluent as feed of step (b).

11. (Previously presented) The process according to claim 10, wherein the pressure in step (a) is between 100 to 150 bar and the pressure in step (b) is between 30 and 60 bar.

12. (Previously presented) The process according to claim 11, wherein the catalyst used in step (a) is a pre-sulphided hydrodesulphurisation catalyst comprising nickel and tungsten on an acid amorphous silica-alumina carrier.

13. (Previously presented) The process according to claim 12, wherein the sulphided hydrodesulphurisation catalyst has a hydrodesulphurisation activity of higher than 30%, wherein the hydrodesulphurisation activity is expressed as the yield in weight percentage of C₄-hydrocarbon cracking products when thiophene is contacted with the catalyst under standard hydrodesulphurisation conditions, wherein the standard conditions consist of contacting a

hydrogen-thiophene mixture with 200 mg of a 30-80 mesh catalyst at 1 bar and 350 °C, wherein the hydrogen rate is 54 ml/min and the thiophene concentration is 6 vol% in the mixture.

14. (Previously presented) The process according to claim 13, wherein the hydrodesulphurisation activity of the catalyst is lower than 40%.

15. (Currently amended) The process according to claim 14, wherein the hydrodesulphurisation catalyst is obtained in a process wherein nickel and tungsten are ~~where~~ impregnated on the acid amorphous silica-alumina carrier in the presence of a chelating agent.

16. (Previously presented) The process according to claim 15, wherein the alumina content of the hydrodesulphurisation catalyst is between 10 and 60 wt% as calculated on the carrier alone.

17. (Previously presented) The process according to claim 16, wherein the silica-alumina carrier has an n-heptane cracking test value of between 310 and 360 °C, wherein the cracking test value is obtained by measuring the temperature at which 40 wt% of n-heptane is converted when contacted, under standard test conditions, with a catalyst consisting of said carrier and 0.4 wt% platinum.

18. (Previously presented) The process according to claim 17, wherein the silica-alumina carrier has an n-heptane cracking test value of between 320 and 350 °C.

19. (Previously presented) The process according to claim 18, wherein the catalyst comprises between 2-10 wt% nickel and between 5-30 wt% tungsten.

20. (Previously presented) The process according to claim 19, wherein the surface area of the hydrodesulphurisation catalyst is between 200 and 300 m²/g.

21. (Previously presented) The process according to claim 20, wherein the total pore volume of the hydrodesulphurisation catalyst is above 0.4 ml/g.

22. (New) The process according to claim 8, wherein the wax conversion in step (a) is between 45 and 60%.

23. (New) The process according to claim 8, wherein gas oil and kerosene product having excellent low temperature properties is separated from the effluent of step (b).